

REMARKS

In response to the Office Action dated May 18, 2006, Applicants amended claims 1, 5, 19, 23, 24 and 64, and added new claims 72-75. Claims 13, 28, 33-63 and 71 were previously cancelled. Claims 1-4, 6-12, 14-22, 24-27, 29-32, 64-70, 72 and 73 are presented for examination.

Claim Objections

Claim 24 has been objected to as being of improper dependent form for failing to further limit the subject matter of a previous claim. Specifically, as originally filed claim 24 depended from later claim 29. Applicants have amended claim 24 to depend from claim 19. Therefore, Applicants respectfully request that this objection be withdrawn.

35 U.S.C. § 103

The examiner rejected claims 1-4, 6, 7, 9-11, 17, 19-22, 25, 26, 32, 64, 65, 66, 68 and 69 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pub. 2001/0047166 (“Wuchinich”) in view of U.S. Pub. 2003/0045887 (“Sakurai”). As amended, Applicants’ claims cover devices that include an ultrasonic probe “configured to produce cavitation along the longitudinal axis in the a medium surrounding the probe during use.” (Emphasis added). Neither Wuchinich nor Sakurai, taken alone or in combination, discloses or suggests such devices. Even if a person of ordinary skill in the art would have been motivated to combine Wuchinich and Sakurai, which Applicants do not concede, the result would not be the devices covered by claims 1-4, 6, 7, 9-11, 17, 19-22, 25, 26, 32, 64, 65, 66, 68 and 69. Therefore, Applicants request reconsideration and withdrawal of this rejection.

The Examiner also contended in the office action that, in order to provide decreased procedure time and less residual tissue damage, a person of ordinary skill in the art would have been motivated to combine the teachings of Wuchinich, Sakurai, and Rabiner to achieve an ultrasonic probe that can be used to ablate biological material along a portion of the longitudinal axis of the probe using cavitation. However, a person of ordinary skill in the art would not have been motivated to combine the teachings of Wuchinich, Sakurai, and Rabiner, as suggested by the Examiner. Wuchinich describes an ultrasonic tissue dissection system that produces both

longitudinal and torsional motion at a tissue contacting tip for the purpose of dissection. (paragraph 62). Similarly, Sukarai describes an ultrasonic calculus treatment apparatus that transmits longitudinal and/or torsional vibration to a distal tip of the apparatus for contact with a calculus. See Abstract; see also, paragraphs 42-51. Rabiner, describes an ultrasonic medical device including a probe that transmits transverse ultrasonic energy along its length (paragraph 26). (Emphasis Added). The geometry and operation of the probe allows for a sweeping ablation and removal of tissue, by way of cavitation, along the length of the probe (paragraph 45).

A person of ordinary skill in the art would not have been motivated to combine the teachings of Wuchinich, Sakurai, and Rabiner. As discussed above, the functionality of the systems of Wuchinich and Sakurai are quite different from the functionality of the systems of Rabiner. While Wuchinich and Sakurai transmit longitudinal/torsional vibrations along their probes to provide action at a distal tip, Rabiner transmits transverse vibrations along his probe to provide cavitation along the length of the probe. A person of ordinary skill in the art would not have had a reasonable expectation of success in using Wuchinich's or Sakurai's probes in the manner described by Rabiner to produce cavitation. As described above, Rabiner's probe is configured to produce cavitation in response to transverse vibration, while Wuchinich's and Sakurai's probes are configured for use with torsional vibration. The suggestion to combine the separate features described in the prior art can be found only in the Applicants' own specification, and it is axiomatic that Applicants' specification cannot be used as a blueprint to reconstruct the invention from the teachings of the prior art. See, e.g., Interconnect Planning Corp. v. Feil, 774 F.2d 1132 (Fed. Cir. 1985).

The Examiner rejected claims 5 and 23 under 35 U.S.C. § 103(a) as being unpatentable over Wuchinich in view of Sakurai and further in view of Rabiner. However, as discussed above, a person of ordinary skill in the art at the time of Applicants' invention would not have been motivated to combine these cited references in a manner to produce a probe configured to produce cavitation along a longitudinal axis in a medium surrounding the probe during use. Therefore, Applicants request reconsideration and withdrawal of this rejection.

The Examiner rejected claims 8, 12, 14-16, 24, 27, 29, 31, 67 and 70 under 35 U.S.C. § 103(a) as being unpatentable over Wuchinich in view of Sakurai and further in view of U.S. Pub. 2003/0212331 ("Fenton"). However, Fenton fails to cure the deficiencies of Wuchinich and

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Sakurai discussed above. Therefore, Applicants request that this rejection be reconsidered and withdrawn.

The Examiner rejected claim 18 under 35 U.S.C. § 103(a) as being unpatentable over Wuchinich in view of Sakurai and further in view of U.S. Pat. 6,433,464 ("Jones"). However, Jones fails to cure the deficiencies of Wuchinich and Sakurai discussed above. Applicants, therefore, request reconsideration and withdrawal of this rejection.

No fee is believed to be due for this Amendment; however, if any fees are due, please apply such fees to Deposit Account 06-1050, referencing Attorney Docket No. 18554-035001.

Respectfully submitted,

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